

REMARKS

Entry of the foregoing amendments is respectfully requested.

Summary of Amendments

By the foregoing amendments claim 37 is cancelled and claims 35, 38, 41, 42, 52 and 53 are amended, whereby claims 30-36 and 38-55 will be pending, with claims 30, 40 and 50 being independent claims.

Support for the amended claims can be found throughout the present specification and in particular, the original claims and pages 2, 3, and 7-11 of the present specification.

Applicants respectfully submit that entry of the present amendments (which merely address some of the Examiner's concerns regarding the introduction of new matter) is proper because they do not raise any new issues and do not require any further search. Entry of the present amendments will also reduce the number of issues should it become necessary for Applicants to file an appeal.

Summary of Office Action

As an initial matter, Applicants note with appreciation that the Examiner has indicated consideration of the Supplemental Information Disclosure Statement filed May 30, 2006 by returning a signed and initialed copy of the Form PTO-1449 submitted therein.

Claims 31-35 and 37-55 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

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Claim 42 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 30-34, 36 and 39 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Murayama et al., U.S. Patent No. 5,633,070 (hereafter "MURAYAMA") in view of Van Gompel, U.S. Patent No. 4,753,840 (hereafter "VAN GOMPEL") and Wu et al., U.S. Patent No. 5,202,173 (hereafter "WU").

Claims 35, 37 and 38 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and in view of WU and further in view of Haffner et al., U.S. Patent No. 6,096,014 (hereafter "HAFFNER").

Claims 40-46, 48 and 49 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and further in view of HAFFNER.

Claim 47 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and in view of HAFFNER and further in view of WU.

Claims 50-55 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and further in view of WU and further in view of HAFFNER.

Response to Office Action

Reconsideration and withdrawal of the rejections of record are respectfully requested in view of the foregoing amendments and the following remarks.

Response to Rejection of Claims under 35 U.S.C. § 112, First Paragraph

Claims 31-35 and 37-55 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The rejection alleges that several of the terms and phrases recited in the rejected claims are not described in the specification in such a way as to reasonably convey to one of skill in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Applicants respectfully submit that none of the rejected claims contains new matter. Nevertheless, merely in order to facilitate the examination of the present application and to expedite the issuance of a patent thereon, Applicants have amended some of the rejected claims to address some of the Examiner's concerns. For example, throughout the present claims, the phrase "a copolymer of ethylene and one or more C₄-C₁₀ α-olefins" has been replaced by the phrase "a copolymer of ethylene and a C₄-C₁₀ α-olefin".

Applicants note that "one or more" was merely intended to make it absolutely clear that "a" in the present context is not identical with "one", although this is apparent to one of ordinary skill in the art, anyway. For this reason alone, Applicants have amended the claims and replaced "one or more" by "a".

Applicants further note that it cannot reasonably be assumed that at the time the present application was filed the present inventors were unaware of the existence of ethylene copolymers with more than one C₄-C₁₀ α-olefin and/or that they would have thought that corresponding copolymers would not work for the purpose described in the present application.

With respect to the recitation "the inner tie layer being in direct contact with the

second layer” in claims 31, 43 and 50, Applicants respectfully submit that this recitation is supported by the specification, for example, page 7, lines 28-29 in combination with Figure 1. Figure 1 clearly shows that the tie layer (15) is in direct contact with the second layer, i.e., the nonwoven (1). Neither does the present specification indicate anything to the contrary. Accordingly, the corresponding rejection is without merit and should be withdrawn.

Regarding the term “area weight” in claims 33, 34, 45 and 46, Applicants respectfully submit that this is a conventional term which is simply shorter than the original term “weight per unit area”. That these two terms have an identical meaning can already be taken from the fact that the dimensions thereof are the same, i.e., g/m^2 . Further, it is not seen that the Examiner has alleged, let alone provided evidence, that the terms “area weight” and “weight per unit area” have different meanings. Accordingly, the term “area weight” clearly does not introduce new matter, wherefore the corresponding rejection should be withdrawn.

With respect to the phrase “ a macroembossed effect is transferred from the textile sheet to the [microembossed] polymer film” recited in claims 39, 47 and 54, the Examiner’s attention is directed to, for example, page 9, first and third paragraphs of the present specification. In these paragraphs it is stated, *inter alia*, that “[t]he macroscopic embossed effect, which is four times larger, of the nonwoven (1) is also reproduced in the finished laminate (11), and it is therefore possible to detect and to feel, on the upper side of the film, a transferred microscopic/macroscopic embossed effect of the same Velvaflex pattern” (emphasis added). Accordingly, the corresponding rejection is unwarranted as well.

Regarding the recitation “both the inner layer and the outer layer comprise a thermoplastic polyolefin having a melt index of from 1 to 20 g/(10 min) and a density of from 860 to 900 kg/m³” in claim 50, the Examiner’s attention is directed to present Examples 1 to 3. For example, in Example 1 the outer layer is composed of a thermoplastic polyolefin having a melt index of from 3.5 dg/min (= 3.5 g/(10 min)) and a density of 0.875 g/cm³ (= 875 kg/m³) and of an LDPE in a ratio of 90 to 10. The tie (inner) layer is composed of a thermoplastic polyolefin having a melt index of from 3.5 dg/min (= 3.5 g/(10 min)) and a density of 0.875 g/cm³ (= 875 kg/m³). Accordingly, the corresponding rejection is without merit, wherefore withdrawal thereof is warranted as well.

Response to Rejection of Claim 42 under 35 U.S.C. § 112, Second Paragraph

Claim 42 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for allegedly failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The rejection alleges that there is insufficient antecedent basis for the phrase “the thermoplastic polyolefin”.

Applicants submit that claim 42 has been rewritten, wherefore this rejection is moot.

Response to Rejection of Claims 30-34, 36 and 39 under 35 U.S.C. § 103(a)

Claims 30-34, 36 and 39 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and a newly cited document, i.e., WU.

The rejection essentially alleges that MURAYAMA discloses the elements recited in independent claim 30 with the exception of the textile sheet being macroembossed and

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the polymer film being microembossed. In this regard, the rejection asserts that VAN GOMPEL teaches “that it is old and well-known in the analogous art to have an elastic textile sheet macroembossed ...for the purpose of providing the sheet with a soft cloth like feel and appearance” and that WU teaches “that it is old and well-known in the analogous art to have a polymer film microembossed ... for the purpose of providing the film with an ultra soft, cloth-like texture”. The rejection further alleges that it would have been obvious to one of ordinary skill in the art “to have modified the elastic textile sheet in Murayama et al. to be macroembossed as suggested by Van Gompel in order to provide the sheet with a soft cloth like feel and appearance” and that it would also have been obvious to one of ordinary skill in the art “to have modified the polymer film in Murayama et al. to be microembossed as suggested by Wu et al. in order to provide the film with an ultra soft, cloth-like texture”.

Applicants respectfully traverse this rejection for various reasons. First, Applicants are unable to find in VAN GOMPEL an indication that the nonwoven base ply disclosed therein is macroembossed (in this regard, see page 4, lines 18-19 of the present specification).

Second, MURAYAMA does not appear to mention, let alone recommend, that the nonwoven and/or the film laminated thereto may (or should) be embossed, let alone that the nonwoven should be embossed in a different fashion than the film.

At any rate, there would be no motivation to (macro)emboss the nonwoven “for the purpose of providing the sheet with a soft cloth like feel and appearance” because the nonwoven of MURAYAMA is covered on both sides thereof, i.e., on one side with the film and on the other side with an adhesive (see, e.g., abstract of MURAYAMA). Accordingly,

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even if the nonwoven of MURAYAMA were imparted with a soft cloth like feel and appearance, one of ordinary skill in the art would assume that this does not make any difference because the user would not be able to notice (let alone benefit from) these properties of the completely covered nonwoven.

Third, the film of WU differs from the film of MURAYAMA in several respects, wherefore there is no motivation for one of ordinary skill in the art to treat the film of MURAYAMA in the same manner as the film of WU. For example, the film of WU is a stand-alone film, i.e., is not intended to be laminated to any other layer, let alone to a nonwoven fabric.

Further, the embossed film of WU is not ultra soft and cloth-like due to being embossed, but due to other characteristics. Specifically, in col. 2, lines 49-64, WU states (emphases added):

This invention is directed to an ultra soft cloth-like embossed plastic film. In contrast to embossed plastic films heretofore produced, the films of this invention are extremely soft in their hand feel and quiet, thereby providing properties heretofore unachieved in the plastic film art.

The ultra soft cloth-like film of this invention has an embossed pattern and a plurality of post-embossed stretched areas along lines that are spaced uniformly across the surface areas on both sides of the embossed film. The stretched areas are separated by unstretched areas and the stretched areas have a thickness less than the unstretched areas of the embossed film. The inventive film is characterized by being ultra soft, cloth-like in texture and quiet when compared to the embossed film in its normal unstretched state.

Further, col. 3, lines 18-34 of WU states (emphases added):

This invention is predicated in part upon the discovery that rather stiff and noisy embossed films may be made ultra soft, cloth-like and quiet. The ultra soft embossed plastic films of this invention eliminate the artificial appearance otherwise attributable to embossed plastic. Accordingly, this invention provides for a new dimension in embossed plastic films after several decades of their development as set forth in the background of this invention.

The films of this invention provide a barrier against liquid and yet have the appearance and feel of woven or non-woven fabrics. Alternatively, the films may be selectively perforated to meet the demands of breathable or permeable films. Furthermore, the post-embossed stretching methods according to this invention produce embossed films with textures and visible appearances heretofore unachieved in plastic films.

Accordingly, what WU teaches is that embossed films are usually not desirable but that the particular manner in which WU post-treats these embossed films overcomes their deficiencies in several respects. In other words, the teaching of WU is not a motivation but a disincentive to (micro)emboss the film of MURAYAMA.

Applicants respectfully submit that for at least all of the foregoing reasons the rejection of claim 30 (and the claims dependent therefrom) under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and WU clearly is without merit and should be withdrawn, which action is respectfully requested.

Response to Rejection of Claims 35, 37 and 38 under 35 U.S.C. § 103(a)

Claims 35, 37 and 38 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and in view of WU and further in view of HAFFNER.

This rejection is respectfully traversed as well. Applicants note that claims 35 and 38 are dependent from claim 30 (claim 37 is cancelled). As has been set forth in detail above, claim 30 is non-obvious over the combined disclosures of MURAYAMA, VAN GOMPEL and WU, and the same necessarily applies to the claims dependent therefrom. For this reason alone, the rejection of claims 35 and 38 under 35 U.S.C. § 103(a) is without merit and should be withdrawn.

Response to Rejection of Claims 40-46, 48 and 49 under 35 U.S.C. § 103(a)

Claims 40-46, 48 and 49 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and further in view of HAFFNER.

With respect to independent claim 40, the rejection concedes that MURAYAMA fails to disclose that the elastic sheet is macroembossed and that the polymer film has a melt index of from 1 to 20 g/(10 min) and a density of from 860 to 900 kg/m³. In this regard, the rejection alleges that VAN GOMPEL teaches “that it is old and well-known in the analogous art to have an elastic textile sheet macroembossed ...for the purpose of providing the sheet with a soft cloth like feel and appearance”. The rejection further alleges that HAFFNER teaches “that it is old and well-known in the analogous art to have a polymer film including a thermoplastic elastomer having a melt index of from 1 to 20 g/(10 min) and a density of from 860 to 900 kg/m³ ... for the purpose of providing a breathable film that has a high water vapor transmission rate and toughness that impart a wide variety of functionalities including vapor permeability, liquid impermeability, and comfort.” The rejection asserts that it would, therefore, have been obvious to one of ordinary skill in the art to provide the subject matter of claim 40.

Applicants respectfully traverse this rejection as well. Specifically, as already pointed out above with regard to the rejection of independent claim 30, Applicants are unable to find in VAN GOMPEL an indication that the nonwoven base ply is macroembossed (in this regard, see page 4, lines 18-19 of the present specification).

Further, MURAYAMA does not appear to teach or suggest that it would be advantageous to have an embossed nonwoven, let alone a macroembossed nonwoven.

At any rate, there would be no motivation to (macro)emboss the nonwoven “for the

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purpose of providing the sheet with a soft cloth like feel and appearance” because the nonwoven of MURAYAMA is covered on both sides, i.e., on one side with the film and on the other side with an adhesive. Accordingly, even if the nonwoven of MURAYAMA were imparted with a soft cloth like feel and appearance, one of ordinary skill in the art would assume that this does not make any difference because the user would not be able to notice (let alone benefit from) these properties of the completely covered nonwoven.

Regarding HAFFNER, the film disclosed in this document contains a substantial amount, i.e., at least 40 % by weight of a filler such as calcium carbonate with a particle size that contributes to pore formation (see, e.g., col. 3, lines 3-13 and the independent claims of HAFFNER). It is not seen that MURAYAMA mentions or recommends the use of a film which contains filler, let alone substantial amounts of filler.

Also, while at page 13 of the present Office Action the Examiner correctly points out that HAFFNER discloses ethylene copolymers having a density of at least 0.900 g/cm³, Applicants are still unable to find any disclosure in HAFFNER which would indicate “that it is old and well-known in the analogous art to have a polymer film including a thermoplastic elastomer having a melt index of from 1 to 20 g/(10 min) and a density of from 860 to 900 kg/m³ ... for the purpose of providing a breathable film that has a high water vapor transmission rate and toughness that impart a wide variety of functionalities including vapor permeability, liquid impermeability, and comfort.”

HAFFNER fails to disclose that the ethylene copolymers used therein should have a density of from 0.860 to 0.900 g/cm³ (i.e., not higher than 0.900 g/cm³), let alone for the purpose of providing a breathable film that has a high water vapor transmission rate and toughness that impart a wide variety of functionalities including vapor permeability, liquid

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impermeability, and comfort. In this regard, Applicants note that in col. 6, lines 24-31, HAFFNER states (emphasis added):

Generally, it has been possible to produce films with a water vapor transmission rate (WVTR) of at least about 300 grams per square meter per 24 hours, measured by the ASTM E-96-80 WVTR test (using Celgard.RTM. 2500 as control). In general, factors that affect the amount of breathability include the amount of filler, the film stretching conditions (e.g., whether it is performed at ambient or elevated temperatures), orientation ratio, and film thickness.

The above passage makes it clear that the breathability of the film of HAFFNER has nothing to do with properties such as density and melt index of the polymer. Further, at col. 4, lines 13 to 42, HAFFNER states (emphasis added):

The physical characteristics of unfilled films made from super-octene resins do not distinguish this resin from conventional LLDPE resins, as illustrated in Table A below. Table A lists physical data of Dowlex® NG 3347A and, for comparison, data of certain "conventional" LLDPE resins, Dowlex® 2045 and 2244A.

...
As can be seen from Table A above, the typical properties ((a) through (d)) of unfilled films from these various resins are not remarkably different. Minor variations could be explained by variations in melt index and α -olefins density or crystallinity.

Accordingly, HAFFNER also makes it clear that only in the presence of (considerable amounts of) filler is there a noteworthy difference between the copolymers disclosed therein and conventional ethylene copolymers.

For at least all of the forgoing reasons, there is no motivation for one of ordinary skill in the art to combine the teaching of MURAYAMA with those of VAN GOMPEL and HAFFNER, let alone in order to arrive at the subject matter of present claim 40. Accordingly, the rejection of independent claim 40 (and the claims dependent therefrom) under 35 U.S.C. § 103(a) over MURAYAMA in view of VAN GOMPEL and further in view of HAFFNER is without merit, wherefore withdrawal thereof is warranted.

Response to Rejection of Claim 47 under 35 U.S.C. § 103(a)

Claim 47 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and in view of HAFFNER and further in view of WU.

This rejection is respectfully traversed as well. Specifically, claim 47 is dependent from claim 40. As has been set forth in detail above, claim 40 is not rendered obvious by the combined disclosures of MURAYAMA, VAN GOMPEL and HAFFNER, and the same necessarily applies to the claims dependent therefrom. For this reason alone, the rejection of claim 47 under 35 U.S.C. § 103(a) is without merit and should be withdrawn.

Additionally, Applicants point out that claim 47 recites that the polymer film is microembossed and a macroembossed effect is transferred from the textile sheet to the polymer film. Applicants are unable to find a disclosure in any of the four documents cited by the Examiner in this regard which would render the subject matter of claim 47 obvious, and neither does the present Office Action appear to give any specific reasons for the corresponding allegation. At any rate, there appears to be not even a document which discloses a macroembossed textile sheet, which makes it impossible to conclude that a macroembossed effect would be transferred from the textile sheet to a polymer film.

Response to Rejection of 50-55 under 35 U.S.C. § 103(a)

Claims 50-55 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over MURAYAMA in view of VAN GOMPEL and further in view of WU and further in view of HAFFNER. With respect to independent claim 50 the rejection concedes that MURAYAMA fails to disclose the elastic textile sheet being macroembossed, the polymer film being microembossed and both the inner layer and the outer layer comprising a

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thermoplastic polyolefin having a melt index of from 1 to 20 g/(10 min) and a density of from 860 to 900 kg/m³ but alleges that each of these missing elements is rendered obvious by either VAN GOMPEL, WU or HAFFNER.

Applicants respectfully traverse this rejection for at least all of the reasons that have been set forth in detail with respect to the rejections of independent claims 30 and 40. No additional comments appear to be necessary in this regard. Accordingly, the rejection of claim 50 and the claims dependent therefrom under 35 U.S.C. § 103(a) is unwarranted as well, and withdrawal thereof is respectfully requested.

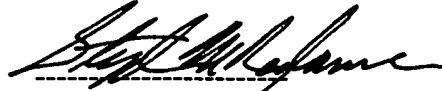
Applicants point out that the fact that not all of the allegations set forth in the present Office Action have been addressed above is by no means to be construed as Applicants' admission that any of the allegations that have not been addressed is meritorious. Applicants have refrained from addressing some of the allegations for the sole reason that in view of the clear facts set forth above there appears to be no need to discuss each and every allegation, especially those relating to dependent claims only.

CONCLUSION

In view of the foregoing, it is believed that all of the claims in this application are in condition for allowance, which action is respectfully requested. If any issues yet remain which can be resolved by a telephone conference, the Examiner is respectfully invited to contact the undersigned at the telephone number below.

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Respectfully submitted,
Michel GILLET et al.

A handwritten signature in black ink, appearing to read "Neil F. Greenblum", written over a horizontal dashed line.

Neil F. Greenblum
Reg. No. 28,394

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GREENBLUM & BERNSTEIN, P.L.C.
1950 Roland Clarke Place
Reston, VA 20191
(703) 716-1191

Stephen M. Roylance
Reg. No. 31,296